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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,944	07/15/2003	Christopher R. Wilson	1033-SS00401	6802

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EXAMINER	
STERRETT, JONATHAN G	

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/619,944	WILSON ET AL.	
	Examiner	Art Unit	
	Jonathan G. Sterrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10-21-2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Summary

1. **Claims 1-40** are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Weigel** in view of **Bogart US 6,163,607** (hereinafter **Bogart**).

Weigel, Don; Cao, Buyang; "Applying GIS and OR Techniques to Solve Sears Technician-Dispatching and Home Delivery Problems", Jan/Feb 1999, Interfaces, 29, 1, ABI/INFORM Global, p.112.

Regarding **Claim 1**, Weigel teaches:

a service request interface configured to communicate with a service request system;

Page 113 paragraph 3 line 15-16, customers call in to communicate with the service request system.

Page 114 column 2 line 13-14, the EHDS/CARS interfaces with the mainframe to receive service orders.

a dispatch system interface configured to communicate with a dispatch system; and

Page 114 column 2 line 15-17, system uploads dispatching information, i.e. through a dispatch system interface configured to communicate with a dispatch system.

a service assignment module configured to assign a service request to a technician from a pool of available technicians based on their skills and abilities

Page 116 column 1 line 20-26, the system (i.e. service assignment module) assigns service requests to technicians from a pool based on their skills and abilities to provide repair, i.e. their primary and secondary skills.

the service request received via the service request interface,

Page 114 column 2 line 13-14, the EHDS/CARS interfaces with the mainframe to receive service orders

the service assignment module notifying the technician of the service request via the dispatch system interface.

Column 2 line 15-18, system has eliminated dispatchers from communicating with local workforce, thus the system notifies the technicians directly from the dispatch system interface.

Page 115 Figure at top of page – the technician is automatically provided with service manifests, directions and maps, i.e. notified of the service request through this interface.

Weigel does not teach:

Assigning a technician based at least in part on a historical technician performance statistic.

Bogart teaches:

Assigning a technician based at least in part on a historical technician performance statistic.

Column 3 line 20-25, technicians historical performance is used to assign calls – see also column 5 line 36-40, call assignment is based on this historical performance.

Weigel and Bogart both address providing workforce scheduling, thus both Weigel and Bogart are analogous art.

Bogart teaches that scheduling an employee based on their historical performance helps maximize the performance of an organization by taking the individual performance level of the employees into account (column 3 line 6-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Weigel, regarding providing a service technician scheduling system, to include the step of basing scheduling at least in part on historical employee performance, as taught by Bogart, because it would maximize the performance of an organization by taking the individual performance level of the employees into account.

Regarding **Claim 2**, Weigel teaches:

a geo-location interface configured to access a geo-location system, the geo-location system indicating a location of the technician and

page 119 column 1 line 31-35, the system accesses a GIS system to indicate location of a centroid (seed point) that indicates a location of the technician.

wherein the service request is assigned based at least in part on the location of the technician.

Page 119 column 1 line 39-41, the system takes into account the technician's seed point (centroid) location when assigning service orders.

Regarding **Claim 3**, Weigel teaches:

a service request status interface for accessing status data associated with the service request.

Column 2 line 13-19, the system provides online reports (i.e. through a service request status interface). These reports provide status data associated with the service request including various times, e.g. start and total service time.

Regarding **Claim 4**, Weigel teaches an online service request status interface, as per above in Claim 3, but does not teach:

wherein the service request status interface is a web-based interface, as per Claim 4 or **wherein the service request status interface is accessible by a competitive local exchange carrier**, as per Claim 5.

However, Official Notice is taken that it is old and well known in the art for interfaces, including status request interfaces, to be web-based, as per Claim 4 or accessible through internet dialup (i.e. accessible by a CLEC). Providing web-based status interfaces (as per Claim 4) including those accessible through a dial-up connection (i.e. through a CLEC as per Claim 5) enable customers to access status inquiries flexibly from a variety of locations since they are accessing the interface through the internet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Weigel, regarding providing a service technician scheduling system and online status reporting, to include the step of providing a web-based status interfaces (as per Claim 4) including those accessible through a dial-up connection (i.e. through a CLEC as per Claim 5) because it would provide customers with flexibility in accessing a service request status since they are accessing the interface through the internet.

Regarding **Claim 6**, Weigel teaches:

a system interface configured to access a operation management system,

Page 114 column 2 line 13-15, Sears mainframes interfaces with the CARS/EHDS system (i.e. the operation management system since it manages both delivery and service requests).

the service assignment module configured to transfer service requests to the operation management system via the system interface.

Page 114 column 2 line 13-15, and Figure 2, page 115, CARS/EHDS receive service requests from the mainframe through the system interface.

Note the use of the term "frame" and "frame related" above comprise non-functional, descriptive language.

Also, it would have been obvious to adopt the above service system to a frame system to provide frame related service requests since it is old and well known in the art the frame systems require service and service requests.

Regarding **Claim 7**, Weigel does not teach:

a scoring interface configured to access a technician scoring system, the technician scoring system storing an efficiency scoring associated with the technician.

Bogart teaches:

a scoring interface configured to access a technician scoring system, the

technician scoring system storing an efficiency scoring associated with the technician

Column 2 line 25-30, the system (i.e. a scoring interface) stores scoring information (i.e. an efficiency) based on the employee's (i.e. technician's) performance during the last call-see also column 4 line 55-60.

Weigel and Bogart both address providing workforce scheduling, thus both Weigel and Bogart are analogous art.

Bogart teaches that scheduling an employee based on their historical performance helps maximize the performance of an organization by taking the individual performance level of the employees into account (column 3 line 6-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Weigel, regarding providing a service technician scheduling system, to include the step of storing an employee's efficiency scoring, as taught by Bogart, because it would maximize the performance of an organization by taking the individual performance level of the employees into account.

Regarding **Claim 8**, Weigel teaches:

a statistical knowledge interface configured to access a statistical knowledge system, the statistical knowledge system storing statistical data associated with the service request.

Page 116 column 1 line 11-15 & 26, the assignment rules module accesses the system to store statistical information associated with the service request. In this case the statistical data is average travel time.

Regarding **Claim 9**, Weigel teaches tracking the number of completed service calls (i.e. requests), page 127 Table 2 "Completed Calls".

Weigel does not teach:

a billing system interface configured to communicate with a billing system, the billing system to receive completion data associated with the service request.

Official Notice is taken that it is old and well known in the art that Sears has a billing system to ensure customers are billed for the fulfillment of their service request.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Weigel, regarding tracking the completion of service requests to include interfacing said completion data with a billing system to ensure that customers are billed upon the completion of service requests.

Regarding **Claim 10**, Weigel teaches:

a user interface to provide data associated with the technician.

Page 116 column 1 line 11-14, the assignment module allows entry of data associated with the technician to be entered and customized (i.e. thus a user interface).

Regarding **Claim 11**, Weigel teaches:

wherein the user interface is a web enabled interface.

Page 128 Column 2 line 18-25, the user interface used in assigning service requests, is also included in a web-based (i.e. web-enabled) application.

Regarding **Claim 12**, Weigel teaches the web enabled interface as per Claim 11 above, but does not teach:

wherein the user interface includes a JAVA component.

However, Official Notice is taken that it is old and well known in the art for a web application for an interface to include a Java component. The java language provides a way to easily and robustly incorporate various functionalities into a web browser.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Weigel and Bogart, regarding providing service dispatch capability and a web-based user interface, to include the step of wherein the

user interface includes a Java component, because it provides an easy and robust way to incorporate various functionalities into a web browser.

Regarding **Claim 13**, Weigel teaches:

wherein the historic technician performance statistic includes average completion time of a task associated with the service request.

Page 116 column 1 line 26-29, average travel time is average completion time of a task associated with the service request since traveling to the location requiring service is a task associated with the service request.

Claims 14-40 recite similar limitations as those recited in **Claims 1-13** above, and are therefore rejected under the same rationale.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Colling US 2002/0002633 discloses an event notification system for technicians providing service.

Donnelly US 6049776 discloses a system for staffing projects.

Castonguay US 5911134 discloses a method for assigning call service personnel.

Dorne US 2005/0015504 discloses a resource management method and apparatus.

Ho US 6754634 discloses a method for scheduling transportation resources.

Smith US 6430496 discloses a fully automated method for dispatching, monitoring and billing.

Minorplanet Systems USA case study of Cadogan Tate, Feb 15, 2002, p.1. web.archive.org/web/20020215190133/minorplanetusa.com/print_case.asp?8.

PRNewswire, "PointServie Launches Breakthrough on-line Scheduling Solutions", Oct 26, 1999, p.1, ProQuest ID 45806204.

Pickus, Jonathan, "A winning hand", Nov 1999, Geo Info Systems, Vol. 9 Iss. 11, p.30, ProQuest ID 46593275.

Choy, Manhoi, "Distributed database design for mobile geographical applications", Jan-Mar 2000, Journal of Database Management, Vol. 11, Iss. 1, p.3, ProQuest ID 126500841.

Ursitti, Antoinette, "Wireless Wonders", Nov 2000, Plumbing & Mechanical, Troy, Vol. 17, Iss. 9, p. 58, ProQuest ID 64314569.

Francett, Barbara, "An execise in utility", June 1997, Software Magazine, Vol. 17, Iss. 6, ABI/INFORM Global, p. 75.

Bush, Rick, "Five Utilities lead the way to the 21st Century", Jan 1999, Transmission & Distribution World, Vol 51, Iss. 1, p. 14, ProQuest ID 38676882.

Skydel, Seth, "Growth enabled by technology", Dec 2000, Fleet Equipment, vol. 26, Iss. 12, p.38, ProQuest ID 66024622.

Cohn, Michael, "Follow the Fleet", Mar 2002, Internet World, Vol. 8, Iss. 3, p.50, ProQuest ID 110781214.

Pitts, Marilyn, "It's 3:00pm do you know where your trucks are?", June 2002, Reeves Journal, vol. 82, Iss. 6, p.38, ProQuest ID 129610621.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGS 10-25-2005

SUSANNA M. DIAZ
PRIMARY EXAMINER

AU3623